

AMENDMENTS TO THE CLAIMS

1-54. (Canceled)

55. (Currently amended) A semiconductor thin film according to claim 53126, wherein a height of each of said resulting micro-projections is ~~in a range of~~ about 20 nm or less.

56. (Currently amended) A semiconductor thin film according to claim 53126, wherein a diameter of each of said resulting micro-projections is ~~in a range of~~ about 0.1 μm or less.

57. (Currently amended) A semiconductor thin film according to claim 53126, wherein a radius of curvature of each of said resulting micro-projections is ~~in a range of~~ about 60 nm or more.

58. (Currently amended) A semiconductor thin film according to claim 53126, wherein a density of said resulting micro-projections is ~~in a range of~~ about 1×10^{10} pieces/cm² or less.

59. (Canceled)

60. (Canceled)

61. (Currently amended) A semiconductor thin film according to claim 53126, wherein said semiconductor single crystal thin film ~~is made of non-single crystals, single crystals, or a combination thereof~~ includes a polycrystalline semiconductor region.

62. (Currently amended) A semiconductor thin film according to claim 53126, wherein said semiconductor thin film contains a single crystal region having a size of ~~1×10^{-8} cm²~~ about 1×10^{-8} cm² or more.

63. (Currently amended) A semiconductor thin film according to claim 53~~126~~, wherein said ~~semiconductor single crystal~~ thin film contains a single crystal region having an orientation plane which is either of the (100), (111), and (110) planes includes an amorphous semiconductor region.

64-125. (Canceled)

126. (Previously presented) A semiconductor thin film according to claim 53, further comprising:

said an insulating base; and wherein~~[[:]]~~ said semiconductor thin film comprises

a polycrystalline single crystal thin film formed on said insulating base~~[[:]]~~ by heat treating an amorphous semiconductor thin film to form a said polycrystalline thin film has having polycrystalline grains aligned in an approximately regular pattern forming initial micro-projections by uplift of some of said polycrystalline grains; and said micro-projections are each formed at a boundary position among at least three or more of said polycrystalline grains by collisions amongst the polycrystalline grains and by heat treating the polycrystalline thin film, said single crystal thin film having resulting micro-projections formed on a basis of some of the initial micro-projections.

127. (Currently amended) A semiconductor thin film according to claim 126, wherein said resulting micro-projections are aligned in an approximately regular pattern.

128. (Currently amended) A semiconductor thin film according to claim 126, wherein a thickness of said semiconductor thin film is ~~in a range of~~ about 50 nm or less.

129. (Currently amended) A semiconductor thin film according to claim 126, wherein a size of each of said polycrystalline grains is ~~in a range of~~ between about 0.1 μm to and about 4.0 μm .

130-181. (Canceled)

182. (New) A semiconductor thin film according to claim 126, wherein said single crystal thin film forms a top surface of the semiconductor thin film.